Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	CC Docket No. 94-102
Revision of the Commission's Rules	)	
To Ensure Compatibility With	)	
Enhanced 911 Emergency Calling Systems	)	

REPLY COMMENTS OF MOTOROLA, INC.

Motorola, Inc. ("Motorola") respectfully submits its reply to the supplemental comments filed in the above-captioned rulemaking proceeding. These supplemental comments were filed in response to an FCC *Public Notice* noting an agreement recently concluded between the Cellular Telecommunications Industry Association ("CTIA"), the National Emergency Number Association ("NENA"), the Association of Public Safety Communications Officers ("APCO"), and the National Association of State Nine One One Administrators ("NASNA").[1] As discussed below, Motorola believes that the initial comments on the *Agreement* broadly supported the steps taken by CTIA and the public safety organizations, but noted that the *Agreement* is not, in all respects, consistent with the current state of technology and network development. Motorola also believes that the initial comments raise valid concerns, addressed below, regarding the appropriate means for consumer education about wireless E911 and the impropriety of applying E911 requirements to certain classes of mobile operations.

[1]DA 96-108 (Feb. 16, 1996) ("*Agreement*").

Motorola and the initial commenters support the purposes and goals embodied in the CTIA/NENA/APCO/NASNA Agreement. Motorola's original comments on the *Agreement*, like the majority of other commenters, largely supported the goals and purposes of the *Agreement* and heralded the *Agreement* as an important step in wireless E911 implementation.[2] However, like many other commenters, Motorola noted that the *Agreement* proposed an implementation schedule for Phase I compliance that was inconsistent with the current state of technology. Specifically, the deadline does not consider the need to implement and thoroughly test the many substantial upgrades needed to wireless switching systems, as well as the potential requirement to alter existing Public Safety Answering Points ("PSAPs") and local exchange switching centers in areas.[3] Motorola agreed, like many other commenters, that automatic location information ("ALI") should be implemented as a two-step rather than three-step process and that the revised accuracy requirements for ALI were appropriate.[4] Motorola also generally supported the five year time frame for implementation of ALI, but noted that compliance with such a time frame could not be assured given the unpredictability of technological developments.[5] As a final matter, Motorola urged the Commission to ensure,

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[2]BellSouth Corporation Comments at 2; Motorola, Inc. Comments at 3; Nextel Communications, Inc. Comments at 4; Northern Telecom, Inc. Comments at 1; Personal Communications Industry Association Comments at 3-5; Southwestern Bell Mobile, Inc. Comments at 1; U S West, Inc. Comments at 1, 3; Vanguard Cellular Systems, Inc. Comments at 1, 3-5.

[3]Ad Hoc Rural Cellular Coalition Comments at 3; BellSouth at 4-5; Motorola at 4-6; Nortel at 3-6; PCIA at 9-12; Rural Cellular Association Comments at 2-3; Southwestern Bell at 3-4; U S West at 3-5; Vanguard at 7.

[4]BellSouth at 2; Motorola at 6; Nextel at 3; Nortel at 3; PCIA at 5-7; Vanguard at 3-4.

[5]Motorola Comments at 6-8.

when and if it adopts standards for wireless ALI, that these standards be compatible with all radio frequency technologies, including analog AMPS and digital TDMA and CDMA air interfaces.[6]

Given the critical safety needs implicated by E911 systems, compliance should not be mandated until field trials have confirmed the reliability and accuracy of the underlying technology. Motorola recognizes that some commenters have provided optimistic assessments of timing for E911 compliance.[7] However, one of the primary reasons for remaining cautious regarding E911 deployment is to assure that the technology -- as deployed in the field under real world circumstances -- will perform as expected.[8] For example, although some limited testing of ALI systems for wireless carriers has occurred, the technology must be tested in a variety of propagation environments and technical network configurations with a range of air and PSAP interfaces to assure consistent, reliable delivery of location information. This same point is also true with respect to call back and call hold systems, which must be implemented differently in different services and, indeed, differently even for different systems within the same service. The country's public safety infrastructure is stretched too thinly to require agencies to divert valuable time and resources in reliance upon E911 information that is misleading or, even worse, completely erroneous.

Motorola and the initial commenters agree that consumer education can be accomplished satisfactorily without imposition of equipment labeling requirements.

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[6]*Id.* at 7-8.

[7]*See, e.g.*, KSI, Inc. Comments; Concepts to Operations, Inc. Comments.

[8]*See, e.g.*, PCIA at 12.

Additionally, with some exceptions, Motorola and the initial comments agree with the proposal in the *Agreement* that consumer education on E911 capabilities can be accomplished without equipment labeling requirements.[9] As previously noted, the availability of E911 features is likely to be influenced by the technical interconnection features available in a local exchange area, compatibility with PSAP interfaces, the architecture of the wireless system, and agreements reached with public safety personnel. These factors are system-specific and local in nature, and consequently subscriber education is best accomplished through efforts of the system operator. Indeed, handset labeling by manufacturers is unlikely to accurately describe the availability of E911 in any particular area, is complicated by roaming (since different functionalities could be available in different areas), and is, by its nature, static and would not reflect changes in systems and capabilities over time. As a result, uniform labeling is likely to be uninformative at best and misleading at worst. Motorola therefore urges the Commission to adopt the *Agreement's* proposal to leave subscriber education to local system operators and refrain from imposing labeling requirements on handsets.

Private Mobile Radio Service ("PMRS") systems should not be required to implement E911 compatibility requirements. Motorola also notes that commenters have also raised some important points regarding the breadth of the E911 compliance rules that warrant Commission consideration. Specifically, the commenters observe that private land mobile users do not have an expectation of reaching emergency services by dialing 911 and frequently have other in place established procedures for addressing emergency communications. Therefore, E911

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[9]BellSouth at 11; Nextel at 7-8.

compliance should not be required for PMRS systems.[10] Indeed, many of these systems are not interconnected with the public switched network and may have no means for reaching local PSAPs. In addition, imposing E911 requirements may, in fact, hamper the efforts of on-site rescue personnel by causing confusion and misdirecting calls intended for emergency response teams.

Traditional local Specialized Mobile Radio ("SMR") systems should not be subject to E911 compliance requirements. As recognized by the American Mobile Telecommunications Association ("AMTA") and Nextel Communications, Inc. ("Nextel"), some SMR operations, despite being commercial mobile radio services ("CMRS"), should not be treated the same as cellular and wide area CMRS networks for purposes of E911 compliance.[11] As AMTA observes, unlike wide area systems, traditional local SMRs are "typically considered a business tool" and were created only "to provide cost and spectrum efficient fleet dispatch service for construction, service and other businesses that require communications between dispatchers and vehicles and among vehicles."[12] Moreover, "local area SMRs have only limited interconnection capability," if interconnected at all, and "interconnection with the PSTN is considered an ancillary function which is typically provided for the convenience of the fleet owner or manager, rather than as an integral part of the SMR service itself."[13] As a

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[10]American Mobile Telecommunications Association, Inc. at 4-8; Blooston, Mordkofsky, Jackson & Dickens Comments at 2-4; Brown & Schwaninger Comments at 2-3; Motorola Comments at 3 (filed Mar. 17, 1995).

[11]AMTA Comments at 4-8.

[12]AMTA at 5.

[13]*Id.* at 5-6.

result, SMR subscribers do not have the same expectations with respect to 911 services as users of wide area systems and have evolved their own arrangements for responding to emergencies. Furthermore, the cost and technical complexity of E911 implementation, if possible at all, would compromise the ability of traditional local SMR operations to provide the low cost communications necessary to support industries and businesses. Under the circumstances, traditional local SMR systems should be exempted from compliance with E911 compatibility requirements, even if such systems are commercial in nature.

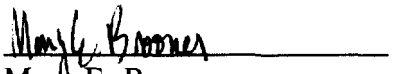
Implementation of terrestrial-based E911 requirements for Mobile Satellite Services is technically infeasible and alternative methods for public safety notification should be considered. [Insert from Phil Malet on MSS, IRIDIUM].

Conclusion. In sum, Motorola believes that the Agreement is a great advance in the implementation of wireless E911 capabilities. The Agreement realistically modifies the accuracy requirements for ALI, proposes a more feasible two phase procedure for transitioning to ALI, and appropriately suggests that consumer education need not require extensive equipment labeling. However, as discussed above, the Agreement does not fully recognize the need to prove out and test new E911 technologies prior to deployment, and therefore adopts a Phase I deadline that appears to be unrealistic. The Agreement also does

not address the scope of E911 requirements, which should exempt MSS, PMRS, and traditional local SMR systems from compliance.

Respectfully submitted,

MOTOROLA, INC.

By: 

Mary E. Brooner
Manager, Wireless Regulatory Policies
Motorola, Inc.
1350 Eye Street, N.W., Suite 400
Washington, D.C. 20005
(202) 371-6900

Dated: March 11, 1996

CERTIFICATE OF SERVICE

James S. Blaszak
Ellen G. Block
Levine, Blaszak, Block & Boothby
1000 Connecticut Avenue, N.W.
Suite 500
Washington, D.C. 20036

Glenn S. Rabin
ALLTEL Mobile Communications
655 15th Street, N.W.
Suite 220
Washington, D.C. 20005

Frank Michael Panek
Ameritech
Room 4H84
2000 West Ameritech Center Drive
Hoffman Estates, IL 60196-1025

Bruce D. Jacobs
Glenn S. Richards
Fisher Wayland Copper Leader & Zaragoza
20001 Pennsylvania Avenue, N.W.
Suite 400
Washington, D.C. 20006

Robert M. Gurss
Wilkes Artis, Hedrick & Lane
1666 K Street, N.W.
Suite 1100
Washington, D.C. 20006

Jim Conran
Ad Hoc Alliance for Public Access to 911
P.O. Box 2346
Orinda, CA 94563

Elizabeth R. Sachs
Lukas, McGowan, Nace & Gutierrez
1111 19th Street, N.W.
Suite 1200
Washington, D.C. 20036

Lon C. Levin
AMSC Subsidiary Corp.
10802 Park Ridge Boulevard
Reston, VA 22091

William F. Adler
Steven N. Teplitz
Fleischman & Walsh
1400 Sixteenth Street, N.W.
Washington, D.C. 20036

James R. Hobson
Donelan, Cleary, Wood & Maser
1100 New York Avenue, N.W.
Suite 750
Washington, D.C. 20005

William B. Barfield
Jim O. Llewellyn
BellSouth Corporation
1155 Peachtree Street, N.E.
Atlanta, GA 30309-3610

Gary O'Malley
Cable Plus
11400 SE 6th Street, Suite 120
Bellevue, WA 98004

Michael F. Altschul
CTIA
1250 Connecticut Avenue, N.W.
Suite 200
Washington, D.C. 20036

Thomas Gutierrez
Lukas, McGowan, Nace & Gutierrez
1111 19th Street, N.W.
Suite 1200
Washington, D.C. 20036

Alicia A. McGlinchey
COMSAT Mobile Communications
22300 COMSAT Drive
Clarksburg, MD 20871

Charles P. Featherstun
David G. Richards
BellSouth Corporation
1133 21st Street, N.W.
Suite 900
Washington, D.C. 20036

Peter Arth, Jr.
Edward W. O'Neill
Ellen S. Levine
People of the State of
California and the Public
Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Adam A. Andersen
CMT Partners
651 Gateway Boulevard
15th Floor
San Francisco, CA 94080

J.D. Hersey, Jr.
Chief, Maritime Radio and
Spectrum Management
Unites States Coast Guard
2100 Second Street, S.W.
Washington, D.C. 20591-0001

Robert A. Mazer
Rosenman & Colin
Suite 200
1300 19th Street, N.W.
Washington, D.C. 20036

Paul R. Schwedler
Carl W. Smith
Regulatory Counsel
Telecommunications, DoD
Defense Information Systems Agency
Code D01
701 S. Courthouse Road
Arlington, VA 22204

Danny E. Adams
Ann M. Plaza
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D.C. 20006

Andrew J. Lachance
David J. Gudino
GTE Service Corporation
1850 M Street, N.W.
Suite 1200
Washington, D.C. 20016

Robert S. Koppel
Richard S. Whitt
IDB Mobile Communications, Inc.
15245 Shady Grove Road
Suite 460
Rockville, Maryland 20850

S.A. Penington
Chairman, Interagency Committee
on Search & Rescue
United States Coast Guard
2100 Second Street, N.W.
Washington, D.C. 20593-0001

David C. Jatlow
Young & Jatlow
Suite 600
2300 N Street, N.W.
Washington, D.C. 20037

Susan H.R. Jones
Gardner, Carton & Douglas
1301 K Street, N.W.
Suite 900, East Tower
Washington, D.C. 20005

B.J. Smith
911 Emergency Telephone Operations
Hillsborough County, Office
of the County Administrator
P.O. Box 1110
Tampa, FL 33601

Brian R. Moir
Moir & Hardman
2000 L Street, N.W.
Suite 512
Washington, D.C. 20036-4907

Charles J. Hinkle, Jr.
KSI Inc.
7630 Little River Turnpike
Suite 212
Annandale, VA 22003

Paul C. Besozzi
D. Cary Mitchell
Besozzi, Gavin & Craven
1901 L Street, N.W.
Suite 200
Washington, D.C. 20036

Larry A. Blosser
Donald J. Elardo
MCI Telecommunications Corp.
1801 Pennsylvania Avenue, N.W.
Washington, D.C. 20006

Paul Rodgers
Charles D. Gray
James Bradford Ramsay
NARUC
1102 ICC Building
P.O. Box 684
Washington, D.C. 20044

Robert S. Foosaner
Lawrence R. Krevor
Laura L. Holloway
Nextel Communications, Inc.
800 Connecticut Avenue, N.W.
Suite 1001
Washington, D.C. 20006

Lyle V. Gallagher
State 911 Coordinator
Emergency Services Communication
Systems Advisory Committee
P.O. Box 5511
Bismarck, N.D. 58502-5511

Thomas H. Bugbee
Bruce Malt
Regulatory Affairs
Telecommunications Branch
Information Technology Services
P.O. Box 2231
Downey, CA 90242

Michael D. Kennedy
Michael A. Menius
Motorola, Inc.
1350 I Street, N.W.
Suite 400
Washington, D.C. 20005

George N. Rover
Deputy Attorney General
AOG/Legal Affairs
State of New Jersey
Hughes Justice Complex
CN 080
Trenton, N.J. 08625-0080

Albert H. Kramer
Robert F. Aldrich
Keck, Mahin & Cate
1201 New York Avenue, N.W.
Penthouse Suite
Washington, D.C. 20005-3919

Stephen L. Goodman
Halprin, Temple & Goodman
1100 New York Avenue, N.W.
Suite 650 East
Washington, D.C. 20005

John G. Lamb
Northern Telecom Inc.
2100 Lakeside Boulevard
Richardson, TX 75081-1599

Lisa M. Zaina
OPASTCO
21 Dupont Circle, N.W.
Suite 700
Washington, D.C. 20036

James P. Tuthill
Betsy Stover Granger
Pacific Bell
140 New Montgomery Street
Room 1525
San Francisco, CA 94105

Naomi L. Wu
Communications Manager
Port Angeles Police Dep't
321 East 5th Street
Port Angeles, WA 98362

Michael J. Celeski
Pertech America, Inc.
One Illinois Center
111 East Wacker Drive
Suite 500
Chicago, IL 60601

Edward R. Wholl
Jacqueline E. Holmes Nethersole
NYNEX Companies
120 Bloomingdale Road
White Plains, N.Y. 10605

David C. Yandell
Technology and Operations
Section, Emergency Management
Division, Oregon State Police
595 Cottage Street, N.E.
Salem, OR 97310

James L. Wurtz
Pacific Bell
1275 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

Mark J. Golden
Personal Communications Industry
Association
1019 - 19th Street, N.W.
Suite 1100
Washington, D.C. 20036

Mary A. Boyd
JEM Co-Chair
Texas Emergency Communications
Commission
1101 Capital of TX Hghwy, South
Austin, TX 78749

Gary Jones
JEM Co-Chair
Omnipoint Corporation
1365 Garden of the Gods Rd
Colorado Springs, CO 80907

Jerome S. Caplan
Redcom Laboratories, Inc.
One Redcom Center
Victor, N.Y. 14564-0995

James D. Ellis
Mary Marks
SBC Communications, Inc.
175 E. Houston, Suite 1306
San Antonio, TX 78205

Jean L. Kiddoo
Shelley L. Spencer
Swidler & Berlin
3000 K Street, N.W.
Suite 300
Washington, D.C. 20007

Leonard Schuchman
Systems Integration Group
Stanford Telecom
1761 Business Center Drive
Reston, VA 22090

O.C. Lee
Procter & Associates
15050 Northeast 36th
Redmond, WA 98052-5317

David L. Jones
Rural Cellular Association
2120 L Street, N.W.
Suite 520
Washington, D.C. 20037

Wayne Watts
Bruce E. Beard
Southwestern Bell Mobile Systems
17330 Preston Road
Suite 100A
Dallas, TX 75252

Peter J. Tyrrell
Springwich Cellular L.P.
227 Church Street
Room 1021
New Haven, CT 06510

Raul R. Rodriguez
Stephen D. Baruch
Leventhal, Senter & Lerman
2000 K Street, N.W.
Suite 600
Washington, D.C. 20006

Alfred Sonnenstrahl
Telecommunications for the Deaf
8719 Colesville Road
Suite 300
Silver Spring, MD 20910

Dan Bart
Eric Schimmel
Ron Angner
Jese Russell
TIA
2500 Wilson Boulevard, Suite 300
Arlington, VA 22201

David Kelley
Terrapin Corp.
11958 Monarch Street
Garden Grove, CA 92641

Norman P. Leventhal
Stephen D. Baruch
David S. Keir
J. Breck Blalock
Leventhal, Senter & Lerman
2000 K Street, N.W.
Suite 600
Washington, D.C. 20036

R. Michael Senkowski
Jeffrey S. Linder
Ilene T. Weinreich
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D.C. 20006

Michael J. Miller
Telident, Inc.
4510 West 77th Street
Suite 101
Minneapolis, MN 55435

Scott A. Sawyer
Assistant Attorney General
Consumer Protection Division
Public Agency Representation
P.O. Box 12548
Capitol Station
Austin, TX 78711-2548

Jeffrey S. Bork
U S West
1020 - 19th Street, N.W.
Suite 700
Washington, D.C. 20036

Arthur A. Butler
Sara Siegler-Miller
Ater Wynne Hewitt Dodson
& Skerritt
601 Union Street
Suite 5450
Seattle, WA 98101-2327

Robert G. Oenning
State of Washington
Statewide E911 Program
1417 - 6th Avenue S.E.
P.O. Box 48346
Olympia, WA 98504-8346

James Carlsen
Westinghouse Electric Corp.
Electronic Systems Group
P.o. Box 746 - MS A475
Baltimore, MD 21203
William T. Bradfield
Tendler Cellular
65 Atlantic Avenue
Boston, MA 02110

Michael L. King
Anacortes Communications Center
Anacortes Police Department
1011 - 12th Street
Anacortes, WA 98221

Martin W. Bercovici
Keller & Heckman
1001 G Street, N.W.
Suite 500W
Washington, D.C. 20001-4545

ITS, Inc.
1919 M Street, N.W.
Room 246
Washington, D.C. 20554

Lorri Ann Ericson
Puyallup City Communications
1531 39th Avenue S.E.
Puyallup, WA 98374

Betsy L. Anderson
1320 N. Court House Road
Eighth Floor
Arlington, VA 22201